

Proposal Reviews

#27: Combining Removal and Management of Tamarix spp. and Arundo donax with Flood Control Operations and Maintenance

California Department of Water Resources, Division of Flood Management

Research and Restoration Technical Panel Review

Sacramento Regional Review

External Scientific Review

#1

#2

#3

Environmental Compliance

Budget

Research and Restoration Technical Panel Review:

CALFED Bay-Delta 2002 ERP PSP Research and Restoration Technical Panel Review Form

Proposal Number: 27

Applicant Organization: California Department of Water Resources, Division of Flood Management

Proposal Title: Combining Removal and Management of Tamarix spp. and Arundo donax with Flood Control Operations and Maintenance

Review:

Please provide an overall evaluation summary rating:

Superior: outstanding in all respects;

Above Average: Quality proposal, medium or high regional value, and no significant administrative concerns;

Adequate: No serious deficiencies, no significant regional impediments, and no significant administrative concerns;

Not Recommended: Serious deficiencies, significant regional impediments or significant administrative concerns.

Overall Evaluation Summary Rating	Provide a brief explanation of your summary rating
-Superior	The panel felt this proposal was not adequate. This proposal is weak in many ways, as noted above. It has no science/information development and is lacking in detail. The regional reviewers felt detail was lacking on monitoring, chemical application and budget breakdown. Monitoring needs to be more rigorous than workers telling their supervisor about new colonists or plants that were not killed. Also, environmental documentation costs are not specified and the budget is not detailed to tasks.
-Above average	
-Adequate	
XNot recommended	

1. **Goals and Justification.** Does the proposal present a clear statement of goals, objectives and hypotheses? Does the proposal present a clear justification and conceptual model for the project?

A. The eradication goals are stated. Objectives and hypotheses is not stated, " B. No - "there is very little new information to gained with this project", "this proposal proposes no study and contains no conceptual model".

2. **Likelihood of Success (Approach, Feasibility, Capabilities and Performance Measures).** Is the project likely to succeed based on the approach, feasibility and project team capabilities? Are the proposed performance measures adequate for measuring the project's success?

A. No - "this project needs to be more than a removal and re-veg effort". B. No - "this proposal does not state any performance measures".

3. **Outcomes and Products.** Will the project advance the state of scientific knowledge in general and/or make an important contribution to the state of knowledge of the Bay-Delta Watershed? For restoration proposals, is the project likely to contribute to ecosystem restoration or species recoveries in a significant way? Will the project produce products useful to decision-makers and scientists?

A. No B. Yes - This project will remove invasive spp. and re-veg the seven-mile project area.
C. No - "because of the lack of project design, sample design, and monitoring design, it is unlikely that products will be of any value to the knowledge base".

4. **Cost/Benefit Comments.** Is the budget reasonable and adequate for the work proposed?

A. Yes - adequate for removal and re-veg, but no other regional benefits.

5. **Regional Review.** How did the regional panel(s) rank the proposal (High, Medium, Low)? Did the regional panel(s) identify significant benefits (regional priorities, linkages with other activities, local involvement) or impediments (local constraints, conflicts with other activities, lack of local involvement) to this proposal? What were they?

A. Sacramento - Low - "lacks clarity of detail in many areas", "lacks detail on a plan, proposed monitoring, chemical application, budget breakdown". B. Yes - eradication of invasive spp., local involvement, consistent with region restoration priorities.; Impediments - this work is DWR responsibility at this time

6. **Administrative Review.** Were there significant concerns about the proposal with regard to the prior performance, environmental compliance and budget administrative reviews? What were they?

Yes - many - environmental documentation costs not specified, permits are needed, budget is not detailed to tasks, very vague and not enough details.

Miscellaneous comments:

None

Sacramento Regional Review:

Proposal Number: 27

Applicant Organization: California Department of Water Resources, Division of Flood Management

Proposal Title: Combining Removal and Management of Tamarix spp. and Arundo donax with Flood Control Operations and Maintenance

Overall Ranking: **X**Low -Medium -High

Provide a brief summary explanation of the committee's ranking:

The panel felt the geographic importance is very high. However, the application states the proposed work is a maintenance responsibility of DWR.

The application also lacks clarity of detail in many areas.

1. Is the project feasible based on local constraints?

XYes -No

How?

The Department of Water Resources proposes to remove non-native invasive species in a 7-mile reach of Cache Creek in Yolo County. The project has partial local buy-in and support.

2. Does the project pursue the restoration priorities applicable to the region as outlined in the PSP?

XYes -No

How?

It is consistent with PSP Sacramento Region Restoration Priorities No. 5. The removal of Arundo Donax is very important to the region.

3. Is the project adequately linked with other restoration activities in the region, such as ongoing implementation projects and regional planning efforts?

XYes -No

How?

DWR will join with the Cache Creek Stakeholders Watershed Group, Cache Creek Conservancy to coordinate activities with upstream NIS removal.

4. Does the project adequately involve local people and institutions?

XYes -No

How?

DWR has worked for 4-years to form a coalition of landowners, agencies, local government and state agencies regarding the project.

Other Comments:

The removal of Arundo Donax and Tamarix (NIS) from tributary streams is very important to the upper reaches of the Sacramento Valley. This project will remove NIS and improve channel capacity. The project ranks high in geographic importance. However, the proposal lacks detail on a plan, proposed monitoring, chemical application, budget breakdown, etc.

External Scientific: #1

Research and Restoration External Scientific Review Form

Proposal Number: 27

Applicant Organization: California Department of Water Resources, Division of Flood Management

Proposal Title: Combining Removal and Management of Tamarix spp. and Arundo donax with Flood Control Operations and Maintenance

Conflict of Interest Statements:

I have no financial interest in this proposal.

XCorrect

-Incorrect

In the blank below please explain any connection to proposal, to applicant, co-applicant or subcontractor or to submitting institution (write "none" if no connection):

None

Review:

Please provide an overall evaluation summary rating:

Excellent: outstanding in all respects;

Good: quality but some deficiencies;

Poor: serious deficiencies.

Overall Evaluation Summary Rating	Provide a brief explanation of your summary rating
-Excellent	This project needs to be more than removal of invasive sp. and re-veg. It needs to replacate treatments for removal mentods, control methods, timing, re-veg methods etc. then develop BMPs for the area.
-Good	
XPoor	

1. **Goals.** Are the goals, objectives and hypotheses clearly stated and internally consistent? Is the concept timely and important?

Fair yes, yes.

It is not stated how the hypotheses will be proved. There is very little new information to be gained with this project. It does provide for arundo and tamarix removal.

2. **Justification.** Is the study justified relative to existing knowledge? Is a conceptual model clearly stated in the proposal and does it explain the underlying basis for the proposed work? Is the selection of research, pilot or demonstration project, or a full-scale implementation project justified?

Fair no - it is not a study, it is removal, yes, yes.

This effort will not result in new information. Arundo and tamarix removal is needed all over calif. . Control and management methods need to be evaluated and BMPs developed.

3. **Approach.** Is the approach well designed and appropriate for meeting the objectives of the project? Are results likely to add to the base of knowledge? Is the project likely to generate novel information, methodology or approaches? Will the information ultimately be useful to decision-makers?

Poor yes, no, no, no.

This project needs to be more than a removal and re-veg effort.

4. **Feasibility.** Is the approach fully documented and technically feasible? What is the likelihood of success? Is the scale of the project consistent with the objectives?

Good yes, good, yes

5. **Project-Specific Performance Measures.** Does the project include appropriate performance measures to measure success relative to the project's goals and objectives? Is there enough detail as to how the performance measures will be quantified? For restoration projects, are monitoring plans explicit and detailed enough to determine if performance measures will be adequately assessed?

Good yes, yes.

6. **Products.** Are products of value likely from the project? Specifically for restoration projects, are products of value also likely from the monitoring component? Are interpretative outcomes likely from the project?

Poor yes - removing invasive sp. on seven miles of creek and re-veg., no, no.

7. **Capabilities.** What is the track record of applicants in terms of past projects? Is the project team qualified to efficiently and effectively implement the proposed project? Do they have available the infrastructure and other aspects of support necessary to accomplish the project?

Good good, yes, yes.

8. **Cost/Benefit Comments.** Is the budget reasonable and adequate for the work proposed?

Good yes.

Miscellaneous comments:

External Scientific: #2

Research and Restoration External Scientific Review Form

Proposal Number: 27

Applicant Organization: **California Department of Water Resources, Division of Flood Management**

Proposal Title: **Combining Removal and Management of Tamarix spp. and Arundo donax with Flood Control Operations and Maintenance**

Conflict of Interest Statements:

I have no financial interest in this proposal.

XCorrect

-Incorrect

In the blank below please explain any connection to proposal, to applicant, co-applicant or subcontractor or to submitting institution (write "none" if no connection):

While an employee of Dept. of Conservation (DOC) in the Office of Mine Reclamation, I worked with Jan Lowery, Cache Creek Conservancy, and David Morrison, Yolo County Public Works, on a CALFED proposal for Arundo and Tamarix eradication on Cache Creek. My involvement with these folks was about 5 years ago, I think. Also, while with DOC, I regularly attended Cache Creek Stakeholders' meetings.

Review:

Please provide an overall evaluation summary rating:

Excellent: outstanding in all respects;

Good: quality but some deficiencies;

Poor: serious deficiencies.

Overall Evaluation Summary Rating	Provide a brief explanation of your summary rating
-Excellent	This proposal is overly general. It does not provide a detailed implementation strategy, a maintenance plan, a sampling design, or a monitoring plan. While the goal of eradicating exotics is laudable, the contribution to the existing knowledge base is questionable. The proposal should also have explicitly stated the difference between their existing mandate for channel maintenance and the proposed project.
-Good	
XPoor	

1. **Goals.** Are the goals, objectives and hypotheses clearly stated and internally consistent? Is the concept timely and important?

The goal of eradicating 7 miles of Arundo and Tamarix is clearly stated; however, objectives are not stated and there appears to be no hypothesis.

The concept is timely and important. However, one might be concerned about futile efforts associated with the eradication of a downstream reach when the upper reaches have yet to be fully treated. In addition, one reason for encroachment of exotics into this watershed is the management of Cache Creek. Without addressing the management of the creek and floodplain, incursions by exotics will continue.

2. **Justification.** Is the study justified relative to existing knowledge? Is a conceptual model clearly stated in the proposal and does it explain the underlying basis for the proposed work? Is the selection of research, pilot or demonstration project, or a full-scale implementation project justified?

This proposal proposes no study; contains no conceptual model. Based on the varying results of other eradication programs within Cache Creek, some level of performance monitoring by eradication method is still warranted. While full-scale implementation is justified, there is no underlying monitoring proposed that will add to the knowledge base on exotic eradication.

3. **Approach.** Is the approach well designed and appropriate for meeting the objectives of the project? Are results likely to add to the base of knowledge? Is the project likely to generate novel information, methodology or approaches? Will the information ultimately be useful to decision-makers?

The approach is generally stated and without a detailed design. For example, the proposal states that all possible methods of treatment will be used (manual, mechanical, and chemical), but does not state if any of these will be used in combination, or only in certain reaches, etc. The only statement in the proposal that addresses adding to the knowledge base is "Long-term monitoring aspect of the project should provide data that substantially enhances the basic knowledge now available" However, the proposal does not state the design of their long-term monitoring plan nor a reporting mechanism. Therefore, one can only assume, in the absence of information, that the results will not add to the knowledge base, and will not generate novel information, methodology, or approaches. And therefore, any information generated will be of limited use to decision-makers.

4. **Feasibility.** Is the approach fully documented and technically feasible? What is the likelihood of success? Is the scale of the project consistent with the objectives?

Approaches, as proposed (i.e., manual, mechanical, and chemical) are fully documented in current literature and the proposal cites such literature and professional organizations. I am unable to determine the likelihood of success because of the lack of detail regarding implementation, and especially the lack of detail regarding maintenance and monitoring. The scale of the project is consistent with the stated goal.

5. **Project-Specific Performance Measures.** Does the project include appropriate performance measures to measure success relative to the project's goals and objectives? Is there enough detail as to how the performance measures will be quantified? For restoration projects, are monitoring plans explicit and detailed enough to determine if performance measures will be adequately assessed?

The proposal does not state any performance measures. It would be difficult, given the lack of quantitative goals, to measure success or failure of this project. The monitoring plan is lacking in detail, just stating that it will be done by DWR, with DWR funds. Perhaps since DWR is funding the monitoring separately, they felt that detail was not needed for this proposal.

6. **Products.** Are products of value likely from the project? Specifically for restoration projects, are products of value also likely from the monitoring component? Are interpretative outcomes likely from the project?

Because of the lack of project design, sample design, and monitoring design, it is unlikely that products will be of any value to the knowledge base. The main product from the eradication program will be the eradication of exotics, which is very valuable, especially in Cache Creek. Perhaps one of the best products would be the interpretative outcome; that is, public and landowners witnessing large-scale eradication (this would only be beneficial if the project works).

7. **Capabilities.** What is the track record of applicants in terms of past projects? Is the project team qualified to efficiently and effectively implement the proposed project? Do they have available the infrastructure and other aspects of support necessary to accomplish the project?

I do not have any knowledge of the applicant's track record. The proposal does not provide such information. I do not have any information on the qualifications of the DWR project team. DWR proposes to partner with other groups in the watershed, but there are no current agreements with such partners. The only proposed partner that is noted on the application is Jan Lowery, Cache Creek Conservancy, and he is well qualified. DWR does have the available infrastructure to support all aspects of this project.

8. **Cost/Benefit Comments.** Is the budget reasonable and adequate for the work proposed?

The budget is reasonable. However, since DWR is responsible for channel maintenance within this area of Cache Creek, one would assume that much of this work could be done within existing DWR authorities and budget, and that use of CALFED funds should be limited to those activities outside of their existing mandates.

Miscellaneous comments:

External Scientific: #3

Research and Restoration External Scientific Review Form

Proposal Number: **27**

Applicant Organization: **California Department of Water Resources, Division of Flood Management**

Proposal Title: **Combining Removal and Management of Tamarix spp. and Arundo donax with Flood Control Operations and Maintenance**

Conflict of Interest Statements:

I have no financial interest in this proposal.

XCorrect

-Incorrect

In the blank below please explain any connection to proposal, to applicant, co-applicant or subcontractor or to submitting institution (write "none" if no connection):

None

Review:

Please provide an overall evaluation summary rating:

Excellent: outstanding in all respects;

Good: quality but some deficiencies;

Poor: serious deficiencies.

Overall Evaluation Summary Rating	Provide a brief explanation of your summary rating
-Excellent	Although eradication portion of proposal is timely and appropriate, more attention needs to be paid to reducing chance for re-infestation and to provide a more rigorous protocol for monitoring.
XGood	
-Poor	

1. **Goals.** Are the goals, objectives and hypotheses clearly stated and internally consistent? Is the concept timely and important?

3 -Good

The primary goal of Tamarix and Arundo eradication along seven miles of lower Cache Creek is clearly stated. The goals of re-establishing native vegetation at various locations along the creek after eradication are less well-articulated and remain rather nebulous. The NIS targeted are very troublesome weeds along riparian corridors so the choice of species is appropriate and timely.

2. **Justification.** Is the study justified relative to existing knowledge? Is a conceptual model clearly stated in the proposal and does it explain the underlying basis for the proposed work? Is the selection of research, pilot or demonstration project, or a full-scale implementation project justified?

3 -Good

This is a very applied project so there is not much conceptual development. The overall justification for the eradication portion of the project appears to be based on reasonably solid experience from previous control efforts. However, given the levee nature of the creek and the rather minimal attention to re-vegetation with native species, it is not clear to me that this is really a restoration project.

3. **Approach.** Is the approach well designed and appropriate for meeting the objectives of the project? Are results likely to add to the base of knowledge? Is the project likely to generate novel information, methodology or approaches? Will the information ultimately be useful to decision-makers?

4 - Fair

Although the initial removal of NIS along the designated area seems very likely, the project does not address very well the potential for re-infestation. Although the applicants recognize the problems with a "downstream" approach, they apparently have not developed a very tight link with upstream control programs. There is very little indication that the monitoring proposed will add significantly to our knowledge base about riparian effects of these species, in part because the creek is bordered by levees in this location and in part because of the very applied nature of the proposal. The monitoring objective for new infestations is poorly described and seems rather haphazard if it depends on maintenance workers' communications to their supervisors. Given the amount of other work these folks have to do at a site, I would not be surprised if they do not place a high priority on reporting Arundo or Tamarix seedlings.

4. **Feasibility.** Is the approach fully documented and technically feasible? What is the likelihood of success? Is the scale of the project consistent with the objectives?

3 - Good

Initial eradication of most plants along the proposed stretch of the creek seems pretty well assured. The question is whether re-infestation is likely from upstream sources and whether the monitoring post-eradication is adequate.

5. **Project-Specific Performance Measures.** Does the project include appropriate performance measures to measure success relative to the project's goals and objectives? Is there enough detail as to how the performance measures will be quantified? For restoration projects, are monitoring plans explicit and detailed enough to determine if performance measures will be adequately assessed?

4 -Fair

The attainment of the first objective would seem to be well measured by the proposed methods. It is not clear that the performance of the monitoring objective is quantified at all.

6. **Products.** Are products of value likely from the project? Specifically for restoration projects, are products of value also likely from the monitoring component? Are interpretative outcomes likely from the project?

3 - Good

The results of weed control on hydrology are likely to represent a favorable "product". There would seem to be minimal potential, however, for the monitoring component to provide any useful products.

7. **Capabilities.** What is the track record of applicants in terms of past projects? Is the project team qualified to efficiently and effectively implement the proposed project? Do they have available the infrastructure and other aspects of support necessary to accomplish the project?

3 - Good

It seems that the applicants have a good grasp of the techniques needed for initial removal of the NIS. It is also good to see the attempt to develop a strong outreach component to the community so that control measures have the support of the local stakeholders. Again, the monitoring component is the weak link here in that only minimally trained maintenance workers are to provide the primary monitoring.

8. **Cost/Benefit Comments.** Is the budget reasonable and adequate for the work proposed?

3 - Good

The budget for the removal operation seems to be reasonable and fairly straightforward.

Miscellaneous comments:

Environmental Compliance:

Proposal Number: 27

Applicant Organization: California Department of Water Resources, Division of Flood Management

Proposal Title: Combining Removal and Management of Tamarix spp. and Arundo donax with Flood Control Operations and Maintenance

1. Are the legal or regulatory issues that affect the proposal identified adequately in the proposal?

-Yes **X**No

If no, please explain:

Project proponent states that DWR will be obtaining permits. On the environmental checklist, some required permits are checked and some are not. Even though DWR will be responsible for permits, proposal should state which permits are likely to be required. These may include a 401, County Agricultural Commission permit for herbicide use, and others.

2. Does the project's timeline and budget reflect adequate planning to address legal and regulatory issues that affect the proposal?

-Yes **X**No

If no, please explain:

There is no money indicated for environmental documentation or permitting in the budget summary. If DWR will be responsible for any costs associated with necessary environmental documentation, the proposal should specify that.

3. Do the legal and regulatory issues that affect the proposal significantly impair the project's feasibility?

-Yes **X**No

If yes, please explain:

If all necessary permits are obtained, this project is feasible.

Other Comments:

Budget:

Proposal Number: 27

Applicant Organization: California Department of Water Resources, Division of Flood Management

Proposal Title: Combining Removal and Management of Tamarix spp. and Arundo donax with Flood Control Operations and Maintenance

1. Does the proposal include a detailed budget for each year of requested support?

☒Yes ☐No

If no, please explain:

2. Does the proposal include a detailed budget for each task identified?

☐Yes ☒No

If no, please explain:

the budget justification doesn't summarize in detail what the budget summary states.

3. Does the proposal clearly state the type of expenses encompassed in indirect rates or overhead costs?

☐Yes ☒No

If no, please explain:

it is very vague. justification doesn't summarize the detail

4. Are appropriate project management costs clearly identified?

☐Yes ☒No

If no, please explain:

very vague. doesn't summarize the detail.

5. Do the total funds requested (Form I, Question 17A) equal the combined total annual costs in the budget summary?

☐Yes ☒No

If no, please explain (for example, are costs to be reimbursed by cost share funds included in the budget summary).

17a a shows \$1,809,000 and the budget summary shows \$1,809,050.00, showing a difference of \$50.00.

6. Does the budget justification adequately explain major expenses?

-Yes **X**No

If no, please explain:

very vague, not enough details

7. Are there other budget issues that warrant consideration?

-Yes **X**No

If yes, please explain:

Other Comments: